EMPOWER TALKING POINTS

(EARLY MEANINFUL PARENTAL OUTREACH WITH EDUCATIONAL RESOURCES)

House Bill 5158

- **Establish formal statewide American Sign Language (ASL) and English language assessment requirements for our deaf, deafblind and hard of hearing (D/DB/HH) children from birth up to age 8.**
- **Mandate the formal statewide system of monitoring, tracking, and report of D/DB/HH children's language benchmarks, both ASL & English.**
- **Mandate legislative law that Michigan will adopt standards of ASL and English assessments that are critical to successful education of D/DB/HH children.**

1. **There are estimated 1.2 million D/DB/HH in Michigan. (Division on Deaf, DeafBlind and Hard of Hearing (DODDBHH)**

2. **Lack of language assessment adds to language deprivation or delays for D/DB/HH children.**
   a. Early intervention programs for deaf children continue to be based on auditory input and speech development that does not ensure deaf children's full access to a language-rich environment.
   b. There are limited formal standardized assessments for ASL and English for D/DB/HH children from birth up to 8, which is a basic human right for all deaf babies and toddlers.

3. **Concerns:**
   a. 92% of D/DB/HH children are born to parents who can hear – only 15% of those parents develop sign language skills necessary to communicate meaningfully. (Mindel/Vernon 1970)
   b. Michigan is ranked 8th in D/DB/HH population, but ranked 48th in statewide services.
   c. A large majority of D/DB/HH children are deprived of early language development and thus are not kindergarten ready.
   d. For over a quarter million of U.S. children that re D/DB/HH, the fact is that they often are unprepared to enter school due to the limited opportunity of incidental learning often causing language deprivation or delay.

4. **Need for Change:**
   a. Michigan Department of Education (MDE) will oversee planning and execution of ASL and English language assessments.
   b. Mandate legislative law that Michigan will adopt standard of LEAD-K that is critical to successful Deaf Education for D/DB/HH children.
   c. Develop culturally and affirmative ASL and English Language Assessments training for the educators,
   d. To raise the awareness and understanding of general public, parents and educators, and how LEAD-K could impact the academic success of the D/DB/HH student.
   e. To provide educational resources (including language support) to parents.

Language Equality and Acquisition for Deaf Kids (LEAD-K)

Ensuring Kindergarten-Readiness – Committing to Deaf Children's Right to Language

All children are born ready to learn. However, far too many deaf children are deprived of early language development and thus are not kindergarten ready. Research has shown that language deprivation or delays between ages 0-5 is the main cause of many deaf children's eventual reading, academic, and social struggles. The type of language-rich environment and the quality of language interaction to which children are exposed in the first five years of life greatly influence the outcomes of their adult lives.

The Problem

Research has shown that the first 3 years of life are crucial for language development and the basis for kindergarten-readiness. Early intervention programs for deaf children continue to be based on auditory input and speech development that, according a growing body of research, does not ensure deaf children's full access to a language-rich environment. Deaf children's success in acquiring language at age appropriate levels when exposed to sign language is well documented, and yet, a majority of deaf children continue to be denied exposure to a visual – or signed -- language. It is a denial of their human right to language. Furthermore, the ineffective early childhood educational system policies perpetuate this injustice. This failure by the educational system to acknowledge a deaf child's visual experience of the world does not reflect the deaf child's full potential.

The Solution

Research has shown that when deaf children are exposed to a rich visual language environment such as American Sign Language, they are provided the foundation for a first language and school readiness. The Deaf community is and has always been a bilingual community, embracing both their native language, American Sign Language, and English. The focus of LEAD-K is to promote language equality & equity, a basic human right for all deaf babies by advocating for deaf children to have access to both American Sign Language and English.

The Strategy

LEAD-K's strategies are twofold: 1) raise the awareness and understanding of the general public, parents, and the educators of the Deaf child's experience in language learning, the role of visual learning for a Deaf child, and how that impacts their academic success; and 2) to work with other partners to change public policy related to the education of Deaf children with bilingualism as the goal (ASL and English).

Key Facts

- By age 5, a child's brain is already 90% developed, yet most deaf children enter kindergarten without language.
- The results of Deaf children not provided access to early language development:
  - Average reading level by 18 years of age has remained at 3rd or 4th grade level for more than a half a century.[1]
  - Only 6% of deaf students scored proficient in English[2]
  - 51% of deaf students scored at the "far below basic" level which is the lowest level of performance[3]
- The lack of early and fully accessible visual language exposure may be a contributing factor to the low levels of reading achievement in the deaf population[4].
- Children are born ready to learn, but for a quarter of a million U.S. children who are deaf, they enter school not prepared to succeed.

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[1] Visual Language & Visual Learning Research Brief: Reading Research & Deaf children; Donna A. Morere, PH.D., June 2011

[2] 2008 California Special Education Management Information system (CASEMIS) Report, California State Department of Special Education

[3] Ibid.

[4] Baker, Sharon, Ed.D, Advantages of Early Visual Language, January 2011; Visual Language & Learning; Gallaudet University

LEAD-K

LANGUAGE EQUALITY & ACQUISITION FOR DEAF KIDS

Mythbusters

The purpose of the Mythbusters is to address misinformation about the LEAD-K bill. The goal of LEAD-K is to ensure a foundation for English literacy among deaf and hard of hearing children whether they use one or both languages, American Sign Language and English for K-readiness.

MYTH	FACT
The LEAD-K bill is a mandate for American Sign Language	The LEAD-K bill does *not* require American Sign Language. The bill provides for language milestone information & assessments for kids who use *one or both* of the languages of American Sign Language (ASL) and English. For purposes of the bill, "English" includes spoken English, written English, or English with the use of visual supplements
MYTH	**FACT**
This bill does not support parents' choice to have their deaf child learn to listen and speak and to "assimilate" into hearing society, without using sign language	The LEAD-K bill does not and will not interfere with a family's decision to have their deaf child learn to listen and speak. Again, the assessments are conducted in *one or both* languages, American Sign Language and English. How to communicate with your child is the family's decision.
MYTH	**FACT**
The advisory board takes away the autonomy of the IFSP and IEP teams that are charged with providing individualized plans for each child	The advisory board is a short term adhoc made up of volunteers whose role is to identify existing resources already developed to be made available for use by families, local education agencies, and the IFSP team or IEP team. Once that task is done, the advisory board is done. The advisory board will not and cannot replace the critical function the IFSP or IEP team.

MYTH	FACT
The advisory board does not include the parents/caregivers as essential members of this process.	**The bill's advisory board includes parents/caregivers as essential members of the process.**
MYTH	**FACT**
A family who has a deaf or hard of hearing child is forced to participate in the assessment.	***Any* assessment must be conducted in compliance with federal law which requires both parental notification and consent, so it is a family choice to participate or not.** **34 CFR §303.321; 34 CFR §303.405.**
MYTH	**FACT**
LEAD-K places additional responsibilities on educators	**Educators doing assessments *is not a new or additional responsibility* for them. They are already required to do assessments.** **The LEAD-K bill simply requires utilizing one with language milestones.** **Note: Federal law defines an assessment as the ongoing procedures used by qualified personnel (educators) to *determine the individual child's present level of performance and early intervention or educational needs.*** **34 CFR §303.321(a)(2).**
MYTH	**FACT**
The data collection does not protect the privacy and confidentiality of the children and the families involved	**Privacy and confidentiality will be protected & preserved. Any data collection and any implementation of this bill must be consistent with federal law regarding the privacy of pupil information and be consistent with federal law regarding the education of children with disabilities.**

MYTH	FACT
The assessment must be appropriate for an individual child, not selected from a list created by a workgroup.	Existing assessment materials, as required by federal law, *must be appropriate to assess the specific areas of developmental need* and are used for the specific purposes for which they were designed. 34 CFR §303.322 The bill requires language development inclusion but will not prevent the IFSP team or the IEP team from utilizing any assessments the team sees fit to best serve the individual child.
MYTH	**FACT**
The proposed law does not address the rights of non-English speaking children, children who are not eligible for special education, or children with unique needs.	Any assessment is administered in compliance with federal law requiring the assessment to be conducted in a nondiscriminatory manner, in the native language of the child or family, and by qualified personnel. 34 CFR §303.322.
MYTH	**FACT**
Requiring assessments of children with disabilities and not requiring them of other children is discriminatory and a civil rights violation.	Any assessment provided must comply with federal law that such assessments are *selected to accurately reflect the child's developmental level.* 34 CFR §303.322 Again, with respect to the above, any assessment must be administered in compliance with federal law requiring the assessment to be conducted in a nondiscriminatory manner, in the native language of the child or family, and by qualified personnel. 34 CFR §303.322. The LEAD-K bill simply requires a language assessment to be included as part of IFSP and IEP assessments.

MYTH	FACT
Some children who are deaf or hard of hearing are not in the special education system, but yet this law would require them to be assessed.	**Any assessment must be conducted in compliance with federal law which requires both parental notification and consent, so a family as they see fit, can either chose to or *not to* participate. 34 CFR §303.321**
MYTH	**FACT**
Federal law already requires an assessment. State law can't "require" an assessment.	**State law cannot require less than federal law requirements, but state law can provide *more protection* than what federal law provides.** **IDEA leaves room for the state to interpret the federal rules and pass their own laws. Thus, a state law providing for language inclusion is not in conflict with federal law in any manner.**
MYTH	**FACT**
An assessment must be deemed to be appropriate for that individual child, and not be restricted to just language.	**While LEAD-K requires *inclusion* of a language development assessment, it does not restrict other assessment domains.** **As required by federal law, assessment materials must be appropriate *to assess the specific areas of developmental need* and used for the specific purposes for which they were designed. 34 CFR §303.322**

For more information please contact: info@lead-k.org

LEAD K

KINDERGARTEN READY
LIFETIME SUCCESS

The following bill are LEAD-K Legislation that has passed* in the following states:

***California SB210 follows LEAD-K's model**

Variation of this model are:

Kansas SB 323

Hawaii SB 2476

Oregon HB 3412

Deaf Child's Educational Bill of Rights Talking Points
House Bill 5159

- **Establish formal statewide American Sign Language (ASL) and English language assessment requirements for our deaf, deafblind and hard of hearing (D/DB/HH) children from kindergarten to high school.**
- **Mandate the formal statewide system of monitoring, tracking, and the reporting of D/DB/HH children's Language Plan, both ASL and English.**
- **Mandate legislative law that Michigan will adopt standards of ASL and English assessments that are critical to successful education for D/DB/HH children.**

1. **There are estimated 1.2 million D/DB/HH children in Michigan. (Division of Deaf, DeafBlind and Hard of Hearing (DODDBHH)**

2. **Lack of language assessment adds to language deprivation or delays for D/DB/HH children.**
    a. Deaf Education programs for deaf children continue to be based on auditory input and speech development that does not ensure deaf children's full access to al language rich environment.
    b. The choice of language and communication modes of D/DB/HH children is respected and to ensure these children have full accessible educational opportunities through an Individual Education Plan (IEP) focused on language and communication needs.

3. **Concerns:**
    a. 92% of D/DB/HH children are born to parents who can hear – only 15% of those parents develop sign language skills necessary to communicate meaningfully. (Mindel/Vernon 1970)
    b. An educational crisis is occurring in Michigan, based on the Michigan State Department of Education data from the Michigan Educational Assessment Program (MEAP) and Michigan Student Test of Educational Progress (M-STEP) scores, past and present. These scores indicate that D/DB/HH students are significantly behind their hearing peers in reading, writing and mathematics.
    c. There is no formal Language Plan developed specifically for D/DB/HH student that is attached to their IEP.
    d. For over a quarter million of U.S. children that are D/DB/HH, the fact is that they often are unprepared to enter school due to the limited opportunity if incidental learning often causing language deprivation or delay.

4. **Need for Change:**
    a. Michigan Department of Education (MDE) will oversee statewide planning and execution of ASL and English Language Plan.
    b. The Deaf Child's Educational Bill of Rights would require a Language Plan to be part of the child's IEP and effectively implement the requirement already under Federal Education Law (Federal Individuals with Disabilities Education Act).
    c. Many local schools districts have minimal experiences with deafness and would benefit from a Language Plan to address the unique language needs of this low-incidence population
    d. To raise the awareness and understanding of the general public, parents and educators, and demonstrate how it could impact the academic success of the D/DB/HH student.

ScienceNews

News: Neuroscience,Biomedicine,Health

Early exposure to signing helps deaf kids on mental task

Developing language skills from birth has benefits in adulthood, study finds

By LAURA SANDERS 1:21PM, FEBRUARY 13, 2016

EARLY SIGNS Exposure to signing before age 3 can boost brainpower in deaf children, a new study suggests.

Susan Stevenson/Shutterstock

Magazine issue: Vol. 189, No. 5, March 5, 2016, p. 14

WASHINGTON — Deaf children who learn to sign early may boost their brainpower in ways unrelated to language.

"Most deaf children are born to hearing families, and most hearing parents do not sign with their newborn deaf children," clinical neuropsychologist Peter Hauser, who is deaf, explained February 12 at the annual meeting of the American Association for the Advancement of Science. "The deaf children, as a consequence, have very limited exposure to sign language," signed Hauser, of Rochester Institute of Technology in New York.

That paucity of input derails not only normal language development, but other aspects of mental

performance, too, Hauser's new research suggests. He and colleagues studied executive function — high-level mental effort that involves controlling attention, impulses and emotions — by having 115 deaf children draw lines between circles with sequential numbers. The kids had to alternate colors of circles, a tricky task because it required resisting the urge to connect circles of the same color.

Compared with children exposed to signing from birth, children who didn't learn to sign until around age 3 took about 17 seconds longer to connect the dots, Hauser reported. What's more, the late signers don't seem to ever catch up. In similar tests of 40 adults, native signers beat the times of late signers by 23 seconds.

This result "shows that it's something that's still there in adulthood," says psychologist and language expert Jenny Singleton of Georgia Institute of Technology in Atlanta.

Earlier work by Singleton examined classrooms of deaf children, some exposed to signing from birth and some who learned to sign later. The late signers required more redirection to follow signed conversations, she and colleagues found. "We now have a preponderance of evidence to suggest that if they have not acquired language early, there can be lifelong impacts," she says.

That means that families of deaf children who receive cochlear implants shouldn't necessarily abandon attempts to sign, she says. If a child doesn't succeed with the implant, then signing would still ensure that the child has a language to use.

Citations

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Further Reading

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Unlocking the Mysteries of the Deaf Brain

November 10, 2011

Story Highlights:

- Peter Hauser is regarded nationally for his studies of deaf vs. hearing human brains and function.
- More than 1,000 people have participated in his research testing.
- Among his findings: Deaf people learn to pick up visual cues peripherally quicker than their hearing peers.
- Creation of a sign language literacy test was needed to assess learning abilities.

Originally published in Research at RIT, Fall/Winter 2012

Although studied for centuries, much remains unknown about the human brain. The deaf brain in particular is still a mystery in part because this population often uses different cognitive and communication processes than hearing people. RIT's Peter Hauser is a leader in analyzing the deaf brain, how it differs from the hearing brain, and the effect of sign language on cognition.

The Deaf Brain vs. The Hearing Brain

Hauser, a deaf clinical neuropsychologist and associate professor in the American Sign Language and Interpreting Education Department at NTID, is investigating how the brain adapts and takes on different functions based on new parameters. In other words, how does deafness itself change how the brain operates?

"We really understand so little about the human brain," Hauser says. "Through my research I am seeking to uncover which cognitive processes are hard-wired, which are plastic, and how deafness or sign language may impact them."

Hauser argues the difference between deaf and hearing brains can have significant clinical impacts that can affect diagnosis and treatment of numerous diseases.

"Suppose a deaf person has a stroke, which impacts his or her communication functions," Hauser adds. "Because deaf people communicate differently and use different parts of the brain in that process, you can't assume he or she will have the same symptoms or respond to the same therapies as a person who is hearing."

Analyzing the Cognitive Process

"Peter is regarded nationally as one of the foremost experts in studies comparing deaf and hearing people's brains and function," says Daphne Bavelier, a professor of brain and cognitive sciences at the University of Rochester who has

collaborated with Hauser for close to a decade. "In particular, he is leading the way in characterizing how growing up deaf or hard of hearing impacts executive functions - a set of skills that is central to academic achievements."

Much of the previous clinical research involving deaf individuals focused on restoring hearing or adjusting learning style to mirror hearing peers. Instead, Hauser focuses on deaf individuals themselves, how they learn, how they think, and how deaf brains process and use information.

Through partnerships with Gallaudet University's NSF Science of Learning Center on Visual Language and Visual Learning (VL2) and the University of Rochester's Brain andVision Laboratory, he has developed comprehensive testing procedures designed to analyze cognition in hearing and deaf individuals. His research includes studies of visual attention, the act of focusing on an object, and executive function, the part of the brain that controls behavior regulation and metacognition.

Hauser's team, which includes students and faculty through NTID's Deaf Studies Laboratory as well as faculty and students at Gallaudet and the University of Rochester, collects data on research participants from all over the world and conducts assessments in multiple written and sign languages. More than 1,000 people have participated in this testing so far.

"We conduct tests when we go to schools and camps for deaf children and academic conferences all over the world-Israel, Turkey, Germany," Hauser says.

"Seeing" Differently

Results garnered through the research, which has been funded primarily by the National Science Foundation and the National Institutes of Health, show clear differences between deaf and hearing individuals in how information is processed.

In one project, Hauser's team studied spatial visual attention in elementary school-aged children and adults to compare differences between populations. They found that elementary aged deaf children perform similarly to their hearing peers. However, as people age, differences in attention grow wider, as deaf adolescents and young adults were more attentive to peripheral events. Hauser explains, "this seems to be an important adaptive ability that makes deaf individuals more aware of what is happening around them, to increase their incidental learning, and to prevent them from dangers."

Hauser says it has been generally understood that deaf people learn to pick up visual cues of what is happening peripherally quicker than hearing individuals, because they have fewer senses to rely on.

"Attention is a key psychological indicator of how information is transmitted from the senses to the brain," he adds. "By showing how this works differently in deaf people, we can assist in developing techniques that foster visual learning."

Hauser has further examined differences in visual processing by comparing reading comprehension between hearing and deaf people. His team tested children ages 8 to 16 from four different countries (with five languages) on letter recognition, word recognition, and how the reader processed semantics and sentence processing. Participants included deaf children of deaf parents, deaf children with hearing parents, hearing children, and hearing children with dyslexia.

The preliminary findings appear to suggest that early sign language acquisition and deaf parents' indigenous knowledge on how to raise deaf children prepare students to become successful readers regardless of the language, written orthography type, or region. Deaf children raised by deaf parents are able to achieve the same basic reading skills as hearing individuals early in life, suggesting that deafness per se does not cause reading challenges but what does have an

effect is being raised in improvised visual language environments that do not foster visual learning.

Hauser's neuroimaging research also suggests that skilled deaf readers use different parts of their brains for processing reading.

"Traditional methods for teaching reading and assessing comprehension are based on how hearing people learn and do not generally take into account the visual needs of deaf learners," Hauser says. "Our research shows that deaf students do not necessarily learn to read more slowly than hearing students-just differently."

Understanding Executive Function

"Attention control, emotional control, impulse control, memory, organizing your thoughts, planning your thoughts-these are all components of executive function that continue to develop in the brain until early adulthood," Hauser says. "And language appears to be a necessary component of executive function development. But for the majority of deaf people growing up in hearing families, language development is delayed."

Hauser argues that inefficient executive function development can have a negative impact on learning and academic achievement. His team is conducting a series of experiments, using both deaf and hearing participants, to investigate the impact of language learning on executive development.

"The problem we encountered when beginning this research was that there are no standardized tests available to measure individuals' sign language fluency," he continues. Given this, the team developed a highly sensitive test of competency in American Sign Language that can easily be administered in a short period of time. Hauser developed a Web-based administration protocol so the test can be administered remotely, with participant responses sent to his laboratory for analysis.

The test is currently being used in a number of psychological, linguistic, and cognitive neuroscience research studies at universities all over the country.

"The creation of this test has finally enabled researchers to test research questions related to the effect of sign language skills on learning and cognition," Hauser adds.

The test has already been adapted to measure German and British sign languages and Hauser hopes to further expand its use in the future.

Promoting the Deaf Learner

On top of his basic research efforts, Hauser has sought to enhance understanding of deaf learners and promote educational and outreach opportunities in the deaf community.

This includes efforts to disseminate information on deaf cognition to the broader scientific and education community as well as supporting the next generation of researchers.

Hauser has presented his research at numerous international conferences, served as a presenter/mentor for the Youth Leadership Conference of the National Association of the Deaf, and served as a delegate to the Test Equity Summit, which sought to ensure that educational testing better accounted for deaf learners. He also co-edited, with NTID Professor

Marc Marschark, the 2008 book *Deaf Cognition: Foundations and Outcomes*, and the 2011 book *How Deaf Children Learn: What Parents and Teachers Need to Know*, both published by Oxford University Press.

Hauser has also worked with numerous students at RIT, NTID, and his partner institutions to promote their research efforts and enhance enthusiasm for the topic as a whole.

Erin Spurgeon, who enjoyed Hauser's enthusiasm for his subject matter when he taught a psychology class she was enrolled in while an RIT/NTID master's student, ended up working as his research associate in the Deaf Studies Laboratory. She worked on several cognition projects and traveled with Hauser to the University of Haifa in Israel in 2009 and to Turkey in 2010 for his international research team meetings. Spurgeon is currently pursuing her Ph.D. in language and communicative disorders in a joint program at the University of California at San Diego and San Diego State University.

"The opportunity to work with Professor Hauser as a research associate was one of the most valuable experiences I had in preparation for this doctoral program," she says. "Students who are interested in deaf research are fortunate to work with a knowledgeable and respected member of the scientific community."

With continued research based at RIT/NTID, Hauser believes a legacy is being built here for deaf cognition, education, and outreach in deaf studies and sign language research.

"My hope is to bring more people into research, have junior faculty involved more, mentor them, create a deaf-friendly lab environment where people can come in and learn how to conduct research," Hauser adds.

More Images:

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Comments for this thread are now closed. ×

6 Comments National Technical Institute for the Deaf 1 Login

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LoveLife25 5 years ago

I am curious if they have ever done studies on a Child of Deaf Adults (CODA), and how their auditory nerve may have developed differently then hearing children born to hearing parents. I am a CODA and both my parents are profoundly deaf. I was only exposed to incidental hearing

Frequently Asked Questions

Considerations for Using an ASL and Spoken English Bilingual Approach with Young Children who Are Deaf and Hard of Hearing

A. What is an ASL and spoken English bilingual approach?

An ASL and spoken English bilingual approach is an approach designed to facilitate early language acquisition in both a visual language (American Sign Language) and a spoken language (English).

You may also see this approach referred to as an ASL and English bimodal-bilingual approach, with bilingual referring to the development of two languages. In this case, it is American Sign Language (ASL) and English, and bimodal refers to language acquisition and use in two modalities, visual and spoken. This approach can be planned and implemented to meet the individual needs of children with varying hearing levels and varying levels of benefit from listening technologies (i.e. hearing aids and/or cochlear implants).

B. How does an ASL and spoken English bilingual approach differ from other approaches where sign language is used?

An ASL and spoken English bilingual approach addresses development of each language and modality early in a child's development. This differs from bilingual-bicultural (bi-bi) approaches, which typically promote establishment of ASL as a child's first language with later attention to development of English, primarily through print. Approaches that include sign systems typically use sign as a support to, or in conjunction with, spoken English.

C. Why consider an ASL and spoken English bilingual approach for young children who are deaf or hard of hearing?

Use of an ASL and spoken English bilingual approach is based on evidence indicating that it is essential for children who are deaf or hard of hearing to have full access to language as early as possible, in order to facilitate development of linguistic competence and avoid language delay. This approach, which facilitates both ASL and spoken English (based on the individual characteristics of each child) early in a child's linguistic development, has the potential to promote and safeguard language acquisition through both visual and auditory modalities. It reflects that most children who are deaf or hard of hearing have the ability to fully access a visual language. It acknowledges that even with early, appropriately fitted, and consistently used amplification and/or cochlear implants, spoken language abilities and outcomes will vary for each child.

D. What is the evidence supporting the use of an ASL and spoken English bilingual approach in early childhood education?

The evidence to support this approach centers on the following findings, observations, and experiences (discussed in the references below):

- the importance of facilitating early language foundations in the most accessible way possible and as early as possible to avoid language delay;

- brain imaging suggesting that the brain can readily handle and can benefit from language development in more than one language and more than one modality without detriment to the development of language in either modality; and
- documentation that use of a visual language can facilitate, map onto, link to, and, in general, support the development of spoken language. (Note: There does not appear to be specific evidence demonstrating that use of a visual language will inhibit spoken language development when spoken language is also utilized and valued in the child's environment.)

E. What are the key components of an ASL and spoken English bilingual early childhood program?

Effective implementation of an ASL and spoken English approach within any early childhood setting requires that the program have a clearly articulated philosophy stating the value and benefit of both ASL and spoken English. Also, at the core of this approach is a systematic, individualized assessment-driven planning process to guide language acquisition and use of both ASL and spoken English. The individualized plan should include:

- a profile documenting a child's background characteristics and abilities in ASL and spoken English (based on informal and formal assessment tools);
- development of achievable goals and objectives in each language and modality;
- identification of how to allocate use of each language and modality within the child's day, and supports, strategies, materials, and resources to facilitate development and use of each language (both at home and in school); and
- ongoing assessment and monitoring to evaluate the effectiveness of the plan in guiding program and service recommendations. The plan must be adaptable in reflecting the child's progress or possible changes in variables such as obtaining a cochlear implant, a decrease in hearing levels, etc.

It is recommended that the educational program include deaf and hearing professionals working collaboratively with families to support the skill development and use of both ASL and English (spoken and written). Successful implementation requires planned, purposeful use and exposure to each language based on the individualized goals of a child.

F. What supports should be provided to facilitate ASL development in early childhood programs using an ASL and spoken English bilingual approach?

When implementing an ASL and spoken English bilingual approach it is important to include a variety of avenues to facilitate a child's ASL development including:

- teachers and professionals proficient in ASL available to provide instruction in the development of ASL as a language. (i.e., ASL classifiers, grammar, facial expression, etc.);
- family sign language classes;
- ASL adult and peer language models to foster language acquisition and learning in natural contexts (i.e. interaction with the Deaf community, Deaf mentor programs);
- daily story signing; and
- ASL resources and materials (i.e., ABC handshape stories, DVDs, iPad apps, etc.).

G. What supports are integral to facilitating spoken English in programs using an ASL and spoken English bilingual approach?

When implementing an ASL and spoken English bilingual approach, it is important to include a variety of avenues to facilitate a child's spoken English development including:

- ongoing audiology testing to gather a clear picture of a child's hearing levels, both with and without amplification;

- exploration of hearing aid and/or cochlear implant benefits early in a child's development, and daily checks and monitoring of listening technologies;
- access to specialists skilled in facilitating spoken English for children who are deaf or hard of hearing (i.e. listening, speaking, speechreading, literacy, etc.);
- opportunities to interact with spoken English adult and peer language models;
- availability of listening, speech, and spoken language materials and resources (i.e. internet-based activities, DVDs, music, and iPad apps); and
- opportunities for oral read-aloud specific to an individual child's profile and plan.

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Resources:

Cochlear Implants: Navigating a Forest of Information ... One Tree at a Time. Resource developed by the Laurent Clerc National Deaf Education Center and available at clerccenter.gallaudet.edu

Early Beginnings for Deaf and Hard of Hearing Children: Guidelines for Effective Services. Paper developed by Marilyn Sass-Lehrer for the Laurent Clerc National Deaf Education Center and available at clerccenter.gallaudet.edu

Early Intervention Network. Network developed by the Laurent Clerc National Deaf Education Center and available at clerccenter.gallaudet.edu

How Early Intervention Can Make a Difference: Research and Trends. Webcast featuring Dr. Beth Benedict. Available at clerccenter.gallaudet.edu

Learning American Sign Language. Paper developed for *Info to Go* at the Laurent Clerc National Deaf Education Center and available at clerccenter.gallaudet.edu

Making a Plan for Your Child: IFSP Considerations for Children Who are Deaf and Hard of Hearing. http://www.cdc.gov/ncbddd/hearingloss/freematerials/planforyourchild.pdf

Sign Language Use for Deaf, Hard of Hearing, and Hearing Babies: The Evidence Supports It. Developed by T. V. Malloy in collaboration with the American Society for Deaf Children and available at clerccenter.gallaudet.edu

Spoken Language Habilitation: Considerations, Resources, and Strategies. Paper developed for *Info to Go* at the Laurent Clerc National Deaf Education Center and available at clerccenter.gallaudet.edu

The Standardized Visual Communication and Sign Language Checklist for Signing Children. http://vl2.gallaudet.edu/resources/visual-communication-and-sign-language-checklist

What the Eyes Reveal About the Brain: Advances in Human Language Acquisition-Insights from Visual Language and Visual Learning (VL2) and the Brain and Language Lab for Neuroimaging (BL^2). Webcast featuring Dr. Laura Ann Petitto. Available at clerccenter.gallaudet.edu